IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicants : Heinz-Werner PFEIFFER et al.

Serial No. : 10/590,769

Filed : June 8, 2007

Title : METHOD FOR THE OUTPUT OF TEXT

INFORMATION VIA A DISPLAY

Art Unit : 2629

Examiner : Yuk CHOW

Confirmation No. : 2496

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APPELLANTS' APPEAL BRIEF UNDER 37 C.F.R. § 41.37

SIR:

Applicants filed a Notice of Appeal dated September 13, 2011 (received at the PTO on September 19, 2011, appealing from the Final Office Action dated June 22, 2011, in which claims 7-14 of the above-identified application were finally rejected. This Appeal Brief is being submitted by Applicants in support of their appeal.

I. REAL PARTY IN INTEREST

The real party in interest in the present appeal is Robert Bosch GmbH of Stuttgart, Germany. Robert Bosch GmbH is the assignee of the entire right, title, and interest in the present application.

II. RELATED APPEALS AND INTERFERENCES

No appeal or interference which will directly affect, or be directly affected by, or have a bearing on, the Board's decision in the pending appeal is known to exist to the undersigned attorney or is believed by the undersigned attorney to be known to exist to Applicants.

III. STATUS OF CLAIMS

Claims 7-14 are currently pending in the present application, stand rejected, and are being appealed. Claims 1-6 have been canceled. Among the appealed claims, claims 7 and 14 are independent.

IV. STATUS OF AMENDMENTS

No Amendment has been made subsequent to the final Office Action mailed on June 22, 2011.

V. SUMMARY OF CLAIMED SUBJECT MATTER

With respect to independent claim 7, the present invention provides a method for outputting text information to a driver of a vehicle via a display unit of a driver information system located inside the vehicle, the display unit having a predetermined display capacity, the method including:

providing text information to be output to the driver of the vehicle via the display unit (Fig. 1, element 25) of the driver information system (Fig. 1, element 2) located inside the vehicle, wherein the text information includes at least one information element (Fig. 1,

location code 241), the at least one information element being divided into at least two component fields, and wherein the at least two component fields include at least an information body (Fig. 1, block 2412) and at least one of an information prefix (Fig. 1, block 2411) and an information suffix (Fig. 1, block 2413) of the information element, and wherein at least one of the information body, information prefix and information suffix having a predetermined abbreviated equivalent (Fig. 1, block 2415 (shortened body), block 2414 (shortened prefix), and block 2416 (shortened suffix)); (Substitute Specification, p. 4, l. 27 - p. 5, l. 27); and

adapting the text information to be output to the driver of the vehicle via the display unit of the driver information system located inside the vehicle, depending on the predetermined display capacity of the display unit of the driver information system located inside the vehicle (p. 3, 1. 30-32), wherein text information outputted on the display unit of the driver information system located inside the vehicle includes: a) full representation of the at least one information element if the predetermined display is sufficient for the full representation (p. 6, 1. 24 - p. 7, 1. 2); and b) the abbreviated equivalent of the at least one of the information body, information prefix and information suffix if the predetermined capacity is insufficient for full representation of the at least one information element (p. 7, 1. 3-8; p. 8, 1. 21-26).

With respect to independent claim 14, the present invention provides a driver information system (Fig. 1, element 2) located inside a vehicle, including:

a display unit (Fig. 1, element 25) located inside the vehicle for outputting text information to a driver of the vehicle;

a control unit (Fig. 1, element 23) for controlling operation of the display unit located inside the vehicle; and

an information data medium (Fig. 1, element 24) coupled to the control unit and storing text information to be outputted by the display unit located inside the vehicle, wherein the stored text information includes at least one information element (Fig. 1, location code 241), the at least one information element being divided into at least two component fields, and wherein the at least two component fields include at least an information body (Fig. 1, block 2412) and at least one of an information prefix (Fig. 1, block 2411) and an information

suffix (Fig. 1, block 2413) of the information element, and wherein at least one of the information body, information prefix and information suffix has a predetermined abbreviated equivalent (Fig. 1, block 2415 (shortened body), block 2414 (shortened prefix), and block 2416 (shortened suffix)); (Substitute Specification, p. 4, l. 27 - p. 5, l. 27);

wherein the text information to be outputted to the driver of the vehicle by the display unit located inside the vehicle is adapted depending on predetermined display capacity of the display unit located inside the vehicle (p. 3, 1. 30-32), wherein the text information outputted on the display unit located inside the vehicle includes: a) full representation of the at least one information element if the predetermined display is sufficient for the full representation (p. 6, 1. 24 - p. 7, 1. 2); and b) the abbreviated equivalent of the at least one of the information body, information prefix and information suffix if the predetermined capacity is insufficient for full representation of the at least one information element (p. 7, 1. 3-8; p. 8, 1. 21-26).

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The following ground of rejection is presented for review on appeal in this case:

(A) Whether pending claims 7-14 are unpatentable under 35 U.S.C. §103(a) over U.S. Patent No. 5,757,268 ("Toffolo") in view of U.S. Patent No. 7,503,001 ("Lekutai").

VII. <u>ARGUMENTS</u>

Claims 7-14 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,757,268 ("Toffolo") in view of U.S. Patent No. 7,503,001 ("Lekutai"). Applicants respectfully submit that the rejection should be withdrawn for at least the following reasons. Claims 7, 8, 10-12 and 14 will be argued as one group; claim 9 will be argued separately; and claim 13 will be argued separately.

A. Rejection of Claims 7, 8, 10-12 and 14

In rejecting a claim under 35 U.S.C. § 103(a), the Examiner bears the initial burden of presenting a *prima facie* case of obviousness. <u>In re Rijckaert</u>, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish a *prima facie* case of obviousness, the Examiner must show, *inter alia*, that there is some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the

art, to modify or combine the references, and that, when so modified or combined, the prior art teaches or suggests all of the claim limitations. M.P.E.P. §2143. In addition, as clearly indicated by the Supreme Court, it is "important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed. See KSR Int'l Co. v. Teleflex, Inc., 82 U.S.P.Q.2d 1385 (2007). In this regard, the Supreme Court further noted that "rejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." Id., at 1396. To the extent that the Examiner may be relying on the doctrine of inherent disclosure in support of the obviousness rejection, the Examiner must provide a "basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristics necessarily flow from the teachings of the applied art." (See M.P.E.P. § 2112; emphasis in original; see also Ex parte Levy, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990)).

Independent claim 7, which will be argued as the representative claim, recites the following (and claim 14 recites substantially similar features as claim 7):

7. A method for outputting text information to a driver of a vehicle via a display unit of a driver information system located inside the vehicle, the display unit having a predetermined display capacity, the method comprising:

providing text information to be output to the driver of the vehicle via the display unit of the driver information system located inside the vehicle, wherein the text information includes at least one information element, the at least one information element being divided into at least two component fields, and wherein the at least two component fields include at least an information body and at least one of an information prefix and an information suffix of the information element, and wherein at least one of the information body, information prefix and information suffix having a predetermined abbreviated equivalent; and

adapting the text information to be output to the driver of the vehicle via the display unit of the driver information system located inside the vehicle, depending on the predetermined display capacity of the display unit of the driver information system located inside the vehicle, wherein text information outputted on the display unit of the driver information system located inside the vehicle includes: a) full representation of the at least

one information element if the predetermined display is sufficient for the full representation; and b) the abbreviated equivalent of the at least one of the information body, information prefix and information suffix if the predetermined capacity is insufficient for full representation of the at least one information element.

With respect to independent claims 7 and 14, the Examiner's asserted rationale for modifying the teachings of Toffolo to incorporate the abbreviated terms as taught by Lekutai is contradicted by the overall teachings of the applied references. In support of the combination, the Examiner asserts that: (i) Toffolo teaches a "base" process of a vehicle reconfigurable display including the step of prioritizing information; and (ii) since Lekutai's teaching of abbreviated messages is applicable to the "base" process of Toffolo, the claimed subject matter would have been obvious. However, contrary to the Examiner's assertion, the method of prioritizing information taught by Toffolo is not only fundamentally incompatible with the claimed feature of using abbreviated equivalents of the component fields of the information element depending on the display capacity, but also fundamentally incompatible with the abbreviation technique taught by Lekutai.

In Toffolo, all of the different information items sought to be displayed are prioritized according to a display hierarchy such that only the highest priority information items are displayed and the lower priority information items are not displayed. (Col. 1, 1, 46-58; col. 3, 1. 18-34). The prioritization method of Toffolo which displays only the highest priority information items among the information items sought to be displayed is fundamentally contradicted by Lekutai's method of uniformly applying the abbreviation technique to all information items sought to be displayed, without any consideration of priority, such that all information items sought to be displayed are actually displayed on the display. In addition, the information items to be prioritized in Toffolo are mainly graphical information items, e.g., dials, maps, etc., which cannot be meaningfully represented with "text abbreviation." In this regard, the display field 74 of Toffolo, which is asserted by the Examiner as being a "component field" having an abbreviated equivalent, is a "sub-map" (see, e.g., col. 8, 1. 58, which explains that display area 74 shows "directions to the nearest gas stations as a sub-map"), and the asserted modification to provide a text abbreviation for the map in field 74 is not only contrary to the principle of displaying the highest priority information items (e.g., the map), but also impractical. In view of the above, the

modification asserted by the Examiner would (i) fundamentally change the principle of operation of the prior art invention being modified (i.e., the prioritization method of Toffolo for selectively displaying only the highest priority items), thereby defeating the obviousness conclusion as a matter of law (MPEP 2143.01 VI), and/or (ii) render the prior art invention being modified (i.e., the prioritization method of Toffolo for selectively displaying only the highest priority items) unsatisfactory for its intended purpose, thereby defeating the obviousness conclusion as a matter of law (MPEP 2143.01 V).

Independent of the above, Applicants submit that the actual teachings of the applied references do not suggest the claimed limitations. In support of the rejection of independent claims 7 and 14, the Examiner contends that display fields 62 and 74 shown in Fig. 7A of Toffolo are equivalent to the claimed "two component fields" of "at least one information element" recited within the limitation "the text information includes at least one information element, the at least one information element being divided into at least two component fields." In support of this assertion, the Examiner contends that "[s]ince display fields 62 and 74 of Toffolo contain text information and they are located within one instrument display panel 70, it's reasonable to read on claimed invention 'one information element being divided into at least two component fields." (Final Office Action, p. 6). The Examiner is contending that any two adjacent display fields within the display panel of Toffolo satisfy the claimed limitation of "the text information includes at least one information element, the at least one information element being divided into at least two component fields," but this interpretation is completely unreasonable in view of the established rules of claim interpretation, as explained in further detail below.

The established rule of claim interpretation is that claims must be given their broadest reasonable interpretation **consistent with the specification** (Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005), cited in MPEP 2111). It is apparent, however, that the Examiner is completely ignoring the guidance provided in the specification regarding the meaning of "information element" and "component fields." In the present specification, it is clearly explained that one "information element" represents a single coherent concept, e.g., a single location name (e.g., "Berlin-Reinickendorf") or a single event (e.g., "congestion"). In contrast, Toffolo clearly indicates that **field 62 is a "low fuel warning"** (col. 8, 1. 55) and display area 74 shows "directions to the nearest gas stations as a **sub-map**" (col. 8, 1. 58),

which means: (i) the information in field 62 is <u>completely separate</u> and <u>distinct</u> from the information within display area 74; and (ii) the information within display area 74 doesn't contain any <u>text information</u> which further explains the "<u>low fuel warning</u>" in field 62. In view of the clear guidance provided in the present specification regarding the meaning of "information element," there is no reasonable basis to conclude that completely <u>separate</u> and <u>distinct fields 62 and 74</u> of Toffolo should be interpreted as two component fields of <u>a single</u> "<u>information element</u>" of "<u>text information</u>."

Independent of the above, to the extent the Examiner contends that Lekutai teaches the claimed limitation of claims 7 and 14 that "the component fields include at least an information body and at least one of an information prefix (Fig. 1D (RST)) and an information suffix (Fig. 1D (NR)) of the information element," this contention is clearly incorrect in view of the above-noted guidance provided in the present specification regarding the meaning of "information element." The Examiner appears to be implicitly asserting that the information body is "PINE STREET," and that anything which is positioned in front of the main body would qualify as "information prefix of the information element," and that anything which is positioned after the main body would qualify as "information suffix of the information element." As clearly explained in Lekutai, "RST" and "NR" are merely abbreviations for the words "RESTAURANT" and "NEAR," respectively, which words are completely unrelated and separate from "PINE STREET." In the present specification, it is clearly explained that one "information element" represents a single coherent concept, e.g., a single location name (e.g., "Berlin-Reinickendorf"), and the prefix ("Berlin") is part of the single "information element," e.g., the single location name. Given this clear guidance in the present specification, there is no reasonable basis to contend that mere juxtaposition of completely separate and unrelated words ("RST" and "NR" positioned around the "information body," which is not explicitly stated by the Examiner) can satisfy the claimed limitation that "the at least two component fields [of the information element] include at least an information body and at least one of an information prefix and an information suffix of the information element." At best, Lekutai merely suggests using an abbreviation for a corresponding individual word, but there is no suggestion in Lekutai regarding any "component fields" of a single "information element," let alone any suggestion of distinguishing among "an information body," "an information prefix" and "an information suffix."

For at least the reasons stated above, claims 7 and 14, as well as dependent claims 8, 10-12, are allowable over Toffolo and Lekutai. Reversal of the obviousness rejection is requested.

B. Rejection of Claim 9

Claim 9, which ultimately depends on claim 7, recites that "each component of information element is displayed on a separate line of the display unit." In support of the rejection of claim 9, the Examiner asserts that col. 3, l. 18-30 of Toffolo teaches the above-recited claimed limitation. However, the cited portion of Toffolo does not contain any disclosure which remotely relates to the above-recited claimed limitation. At best, the cited portion of Toffolo merely discusses the relative priority of various information items.

For at least the foregoing reasons and the reasons stated in connection with parent claim 7, Applicants submit that dependent claim 9 is not rendered obvious by Toffolo and Lekutai. Reversal of the rejection is requested.

C. Rejection of Claim 13

Claim 13, which depends on claim 7, recites that "each of the information body, information prefix and information suffix having an abbreviated equivalent, and wherein the text information to be outputted is adapted hierarchically, whereby outputting of full representation the information body is given highest priority." In support of the rejection of claim 13, the Examiner asserts that col. 1, 1. 46-58 of Toffolo teaches the above-recited claimed limitation. However, the cited portion of Toffolo does not contain any disclosure which remotely relates to the above-recited claimed limitation. At best, the cited portion of Toffolo merely discusses prioritizing among different information items such that only the highest priority information items are displayed and the lower priority information items are not displayed, but this discussion has nothing to with prioritizing the "full representation of the information body" portion of a given information item.

For at least the foregoing reasons and the reasons stated in connection with parent claim 7, Applicants submit that dependent claim 13 is not rendered obvious by Toffolo and Lekutai. Reversal of the rejection is requested.

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VIII. <u>CONCLUSION</u>

For the foregoing reasons, it is respectfully submitted that the final rejection of claims 7-14 should be reversed.

Claims Appendix, Evidence Appendix and Related Proceedings Appendix sections are found in the attached pages.

Respectfully submitted, KENYON & KENYON LLP

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APPENDIX TO APPELLANTS' APPEAL BRIEF UNDER 37 C.F.R. § 41.37

CLAIMS APPENDIX

The claims involved in this appeal, claims 7-14, in their current form after entry of all amendments presented during the course of prosecution, are set forth below:

7. A method for outputting text information to a driver of a vehicle via a display unit of a driver information system located inside the vehicle, the display unit having a predetermined display capacity, the method comprising:

providing text information to be output to the driver of the vehicle via the display unit of the driver information system located inside the vehicle, wherein the text information includes at least one information element, the at least one information element being divided into at least two component fields, and wherein the at least two component fields include at least an information body and at least one of an information prefix and an information suffix of the information element, and wherein at least one of the information body, information prefix and information suffix having a predetermined abbreviated equivalent; and

adapting the text information to be output to the driver of the vehicle via the display unit of the driver information system located inside the vehicle, depending on the predetermined display capacity of the display unit of the driver information system located inside the vehicle, wherein text information outputted on the display unit of the driver information system located inside the vehicle includes: a) full representation of the at least one information element if the predetermined display is sufficient for the full representation; and b) the abbreviated equivalent of the at least one of the information body, information prefix and information suffix if the predetermined capacity is insufficient for full representation of the at least one information element.

8. The method as recited in Claim 7, wherein the text information to be output includes a plurality of information elements, and wherein for each information element, outputting one of: a) full representation of the information element if the predetermined display is sufficient for the full representation; and b) the abbreviated equivalent of the at least one of the information body, information prefix and information suffix if the predetermined capacity is

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insufficient for full representation of the at least one information element.

- 9. The method as recited in Claim 8, wherein each component of information element is displayed on a separate line of the display unit.
- 10. The method as recited in Claim 7, wherein each component of information element has an abbreviated equivalent, and wherein the abbreviated equivalents are output.
- 11. The method as recited in Claim 8, wherein each component of information element has an abbreviated equivalent, and wherein the abbreviated equivalents are output.
- 12. The method as recited in Claim 9, wherein each component of information element has an abbreviated equivalent, and wherein the abbreviated equivalents are output.
- 13. The method as recited in Claim 7, wherein each of the information body, information prefix and information suffix having an abbreviated equivalent, and wherein the text information to be outputted is adapted hierarchically, whereby outputting of full representation the information body is given highest priority.
- 14. A driver information system located inside a vehicle, comprising:
- a display unit located inside the vehicle for outputting text information to a driver of the vehicle;
- a control unit for controlling operation of the display unit located inside the vehicle; and

an information data medium coupled to the control unit and storing text information to be outputted by the display unit located inside the vehicle, wherein the stored text information includes at least one information element, the at least one information element being divided into at least two component fields, and wherein the at least two component fields include at least an information body and at least one of an information prefix and an information suffix of the information element, and wherein at least one of the information body, information prefix and information suffix has a predetermined abbreviated equivalent;

wherein the text information to be outputted to the driver of the vehicle by the display unit located inside the vehicle is adapted depending on predetermined display capacity of the Application Serial No. 10/590,769 Attorney Docket No. 10191/4286

display unit located inside the vehicle, wherein the text information outputted on the display unit located inside the vehicle includes: a) full representation of the at least one information element if the predetermined display is sufficient for the full representation; and b) the abbreviated equivalent of the at least one of the information body, information prefix and information suffix if the predetermined capacity is insufficient for full representation of the at least one information element.

EVIDENCE APPENDIX

In the present application, there has been no evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131 or 1.132, or other evidence entered by the Examiner and relied upon by Appellants in the present appeal.

RELATED PROCEEDINGS APPENDIX

No appeal or interference which will directly affect, or be directly affected by, or have a bearing on, the Board's decision in the pending appeal is known to exist.

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